

REMARKS/ARGUMENTS

Claims 1-5, 7, and 9-21 are pending in the present application. Claims 5 and 9 have been amended. Claims 1, 5, 14, and 18 are independent claims. The Examiner is respectfully requested to reconsider his rejections in view of the following Remarks.

It is respectfully submitted that the amendment to claims 5 and 9 should be entered because they do not raise new issues requiring further search and/or consideration.

Applicant respectfully submits that the amendment to claim 5 is intended to correct an inadvertent error. For reasons discussed in detail below in connection with the § 102(b) rejection, Applicant submits that the subject matter in amended claim 5 has been previously presented for examination and, thus, raises no new substantive issues.

Applicant further respectfully submits that the amendment to claim 9 is not intended to substantively change the scope of the claim. Rather, the amendment is intended to more clearly indicate that "the initial value" in the last two lines of claim 9 refers to the relative source address field's initial value (claim 5), instead of the initial value of the counter. Thus, the amendment to claim 9 is for purposes of clarification (i.e., a matter of formality) and should be entered.

Rejection Under 35 U.S.C. § 102

Claims 5, 10, 11, and 13 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 5,465,251 to Judd et al. (hereafter "Judd"). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Initially, Applicant respectfully submit that independent claim 5 has been amended to correct an error in the previous Reply filed on January 28, 2005 (hereafter "Previous Amendment"). Specifically, in the Previous Amendment, Applicant had intended to amend claim 5 to recite "a counter that is incremented by a preselected step," in conformance with similar amendments to independent claims 1, 14, and 18. Applicant respectfully submits that the omission of this amendment to claim 5 in the Previous Amendment was inadvertent.

Applicant respectfully submits that, regardless of whether the finality of the outstanding Office Action is proper, the claim amendment to claim 5 should be entered because it raises no new issues requiring further search and/or consideration.

As amended, independent claim 5 requires incrementing a counter by a preselected step. In page 5 of the Office Action, the Examiner acknowledges that Judd fails to disclose such a

feature. Because Judd fails to disclose each and every claimed feature of claim 5, Applicant respectfully submits that this § 102(b) rejection has been obviated.

At least for the reasons set forth above, it is respectfully submitted that independent claim 5 is allowable, and that claims 10, 11, and 13 are allowable at least by virtue of their dependency on claim 5. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 1-4, 7, 9, 14, and 18 stand rejected under 35 USC § 103(a) as being unpatentable over Judd in view of U.S. Patent No. 6,801,496 to Saleh et al. (hereafter "Saleh"). This rejection is respectfully traversed.

As discussed above, the Examiner acknowledges that Judd fails to teach incrementing a counter, as required by independent claims 1, 14, and 18. However, the Examiner asserts the following it would have been obvious to one of ordinary skill in the art to combine Saleh's teaching of incrementing a counter with Judd because...

"Saleh's teaching of setting the counter with a zero initial value and incrementing it at each node enables Judd's method to reach **the same result** by incrementing counter [until] it is equal to non-zero initial value

instead of counting down to zero." (page 5 of the Office Action; emphasis added)

Applicant respectfully disagrees with this assertion by the Examiner.

Judd Teaches Away from Proposed Modification

Initially, Applicant wishes to point out the following requirement for an obviousness type analysis under § 103, under MPEP § 2141.02:

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

Applicant respectfully submits that Judd expressly requires decrementing a counter and, thus, directly teaches away from the claimed feature of incrementing a counter.

Specifically, Judd discloses an addressing scheme for a network topology that includes single-port nodes, dual-port nodes, and switch nodes (more than two ports) (col. 4, lines 29-34). Judd teaches that, upon receiving a message, each type of node executes a different set of rules on the message to determine whether to accept received messages (col. 7, lines 12-19). For dual-port and switch nodes, these rules also determine how the node should process and route a non-accepted message.

Judd discloses that the rules in the dual-port nodes specifically require **decrementing** a portion of the address field ("Hi_digit" or "Next_digit")¹ in each non-accepted message before routing the message to the next node (see col. 7, lines 51-67; col. 8, lines 26-43).² Judd further states that this **decrementing** scheme is needed to keep the routing hardware of each node simple (see col. 2, lines 19-25 and 32-41).³

Because Judd specifically discusses the advantages of decrementing the relevant address portion, without contemplating any way of modifying the address portion. Applicant respectfully submits that Judd **teaches away** from the claimed counter incrementing.

¹ The decremented portion is Hi_digit in Scheme A of Judd, while the decremented portion is Next_digit Scheme B.

² The dual-port node is the only type of node disclosed by Judd as using part of the address field as a "hop counter." See, e.g., col. 2, lines 32-43; col. 7, lines 64-67.

³ This section of Judd teaches that routing decisions are made by comparing the modified portion address to zero. Such routing decisions are only possible if this portion of the address is **decremented** to zero.

Proposed Modification Renders Judd
Unsatisfactory for Intended Purpose

Furthermore, as discussed in page 19 of the Previous Amendment, MPEP § 2143.01 sets forth the following criterion for analyzing an obviousness type rejection:

If [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Here, Applicant respectfully submits that the Examiner's proposed modification would render Judd unsatisfactory for its intended purpose.

Specifically, Judd's intricate rule system only works correctly if the Hi_digit/Next_digit portion of the address field (hereafter "address counter") in a non-accepted message is decremented in the dual-port nodes. For instance, if Judd's dual-port nodes were modified to increment the address counter, rather than decrement it, the rules in the subsequent node (regardless of node type) would be unable to correctly determine whether the message should be accepted. Also, modifying Judd's dual-port nodes to increment Hi_digit/Next_digit would not allow

a subsequent switch node to correctly route the message according to the rules.⁴

The fact that incrementing the address counters would render Judd's addressing scheme inoperable is apparent from the specific examples described in Judd at col. 8, lines 43-61 (Scheme A) and col. 9, line 63 - col. 10, line 10 (Scheme B). Both of these examples shows that decrementing the address counter at the dual-port nodes is **essential** to properly routing the message from the initiator node to the destination node in Judd.

Thus, contrary to the Examiner's assertion otherwise, it is clear that modifying Judd to increment a counter would **not** enable Judd to reach the same results. Instead, Applicant respectfully submits that the Examiner's proposed modification of Judd is improper because it would render Judd unsatisfactory for the intended purpose of routing messages within a network of single-port, dual-port, and switch nodes.

⁴ In fact, in Scheme A, the switch nodes would always **reject** the message (rather than accept or forward it) if the dual-port nodes increment the address counters. This is because the Scheme A rules instruct switch nodes to reject messages whose Hi_digit is not zero (see col. 8, lines 14-24); Hi_digit will **never** be zero if it is **incremented** by the dual-port nodes.

Judd/Saleh Fails to Teach Each Claimed Feature

In addition, Applicant points out that MPEP § 2143.03 states the following:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicant respectfully submits that Judd and Saleh, either alone or in combination, do not teach or suggest every claimed feature.

Independent claims 1, 14, and 18 recite incrementing a counter at each node, until the counter reaches a particular value, thereby **indicating that the destination node has been reached**. These recited features simply are not taught in Judd and Saleh.

As discussed above, the Examiner has acknowledged that Judd does not increment a counter. Applicant respectfully submits that Saleh does not remedy this deficiency of Judd.

Saleh teaches incrementing a HOP_COUNT field in Link State Advertisements (LSA's), which are **destined for all nodes that receive them**. Saleh discloses that an LSA is transmitted in order to provide topological information regarding the network to the recipient nodes. In Saleh, each recipient node accepts

the LSA, regardless of the HOP_COUNT value, in order to update a topology database within that node. See col. 7, lines 23-43.

After updating the topology database, the recipient node retransmits the LSA to its neighbor nodes, as long as the HOP_COUNT field has not reached a specific value (i.e., MAX_HOPS). Thus, the purpose of Saleh's HOP_COUNT is to ensure that the LSA does not continue traveling along the network an infinite time. Saleh **does not teach or suggest** that the HOP_COUNT is used for indicating that a destination node has been reached.

Accordingly, Applicant submits that there is no teaching or suggestion in Judd and Saleh of incrementing a counter until it reaches a particular value **indicating that the destination node is reached**, as required by independent claims 1, 14, and 18.

Rejection of Claims 1-4, 7, 9, 14, and 18 Should be Withdrawn

At least for the reasons set forth above, Applicant respectfully submits that independent claims 1, 14, and 18 is allowable. Furthermore, it is respectfully submitted that claims 2-4, 7, and 9 are allowable at least by virtue of their dependency on claim 1. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Rejection of Claims 12, 15-17, and 19-21

Claim 12 stands rejected under 35 USC § 103(a) as being obvious over Judd in view of Official Notice. Furthermore, claims 15-17 and 19-21 stand rejected under 35 USC § 103(a) as being obvious over Judd and Saleh in view of Official Notice.

Initially, Applicant points out that the rejection of claim 12 has been rendered moot by the amendment to independent claim 5, at least for the reasons set forth above in connection with claim 5. Thus, it is respectfully submitted that claim 12 is allowable at least by virtue of its dependency on claim 5. Thus, Applicant respectfully requests reconsideration and withdrawal of the rejection to claim 12.

Furthermore, Applicant respectfully submits that the proposed modifications in these statements of rejection fail to remedy the deficiencies of Judd and Saleh, as discussed in connection with independent claims 14 and 18 above. Therefore, Applicant submits that claims 15-17 and 19-21 are allowable at least by virtue of their dependency on claims 14 and 18. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection to claims 15-17 and 19-21.

Examiner's Taking of Official Notice

Furthermore, in the Response to Arguments section of the Office Action (page 15), the Examiner asserts that:

Because Applicants have failed to challenge any of the Examiner's "Official notices" stated in the previous office action in a proper and reasonably [sic] manner, but rather the motivation in combining the reference with the "Official Notice" taken, they are now considered as admitted prior art. See MPEP 2144.03 [sic]

Applicant respectfully, yet vehemently, disagrees with this assertion.

Initially, Applicants point out that MPEP 2144.03 states the following:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's statement, which would include stating why the noticed **fact** is not considered to be common knowledge or well-known in the art. (emphasis added)

In the first line of the above-quoted section of the MPEP, the phrase "such a finding" refers to a finding of **fact**.

In the Previous Reply, Applicant indeed pointed out the errors in all of the Examiner's statements of official notice. Particularly, Applicant pointed out that all of the Examiner's official notice statements **failed** to present a **finding of fact**. Instead, all assertions of official notice are of **opinion**. They all state something like "Official Notice is taken that it would have been obvious to implement Judd's teaching to all applicable

network environments" (page 10 of the Office Action). To state that something would have been obvious at a particular time is purely a matter of **opinion**, not fact.

In such statements, it is very difficult, if not impossible, to glean any statement of fact the Examiner is attempting to assert. For instance, in the above-quoted statement, is the Examiner actually taking official notice that Judd's teachings have already been applied to all network environments? Such a statement is invalid on its face because Judd patent teaches a particular type of network environment for implementing the addressing scheme. Applicant respectfully submits that the all of the other statements of official notice by the Examiner merely state opinions -- not findings of fact.

In pages 17-18 of the Previous Amendment, Applicant clearly pointed out the error that the Examiner official notice statements failed to present findings of fact. In the present Office Action, the Examiner presumably objects to Applicant's previous arguments as being improper because they do not include formal demands for the Examiner to produce authority for the noticed facts. However, Applicant submits that such demand would be futile in view of the fact that the Examiner **did not provide any noticed fact**.

Thus, Applicant respectfully submits that a valid and reasonable traversing of official notice was made and is repeated herein, and that nothing in the Examiner's official notice statements should be taken as admitted prior art.

Finality of Office Action Improper

Applicant respectfully submits that the finality of the outstanding Office Action is improper in that it presents new grounds of rejection as to dependent claim 9, which were not necessitated by amendment.

It is respectfully submitted that the claim amendments in the Previous Amendment did not substantively change the scope of claim 9, directly or indirectly. Both before and after this Previous Amendment was entered, claim 9 recited that the counter was "counted up" or incremented. However, the Examiner introduced the Saleh patent merely to provide a teaching of incrementing the counter (see page 5 of the Office Action). Because claim 9 previously recited this feature before the claim amendments, Applicant respectfully submits that this new ground of rejection of claim 9 could not have been necessitated by amendment.

Thus, Applicant respectfully submits that the finality of the outstanding Office Action is improper. As such, should the

Examiner not be persuaded to allow the present application in view of the above amendments and remarks, Applicant submits that the amendments made herein should be entered and that a new non-final Office Action should be issued.

Conclusion

Since the remaining patent cited by the Examiner has not been utilized to reject the claims, but to merely show the state of the art, no comment need be made with respect thereto.

Entry of the claim amendments is respectfully requested in that they raise no new issues requiring further search and/or consideration, as discussed in detail above.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider the outstanding rejections and issue a Notice of Allowance in the present application.

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to discuss the present application in order to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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